

MOSKALENKO, Yu.Ye.

Modern medical radio electronics. Usp. sov.r. biol. 51 no.1:125.  
128 Ja-F '61. (MIRA 14:3)  
(MEDICAL ELECTRONICS)

MOSKALENKO, Yu.Ye.; BAYEVSKIY, R.M.; GAZENKO, O.G.

Methods of studying blood circulation in the brain under the  
conditions of a changed gravitational field. Probl.kosm.biol.  
1:400-404 '62. (MIRA 15:12)  
, (GRAVITY--PHYSIOLOGICAL EFFECT)(BRAIN--BLOOD SUPPLY)

MOSKALENKO, Yu.Ye.

Possibility for an experimental evaluation of the blood supply  
to the brain under conditions of a changed gravitational field.  
Probl.kosm.biol. 2:407-416 '62. (MIRA 16:4)  
(BRAIN--BLOOD SUPPLY)  
(GRAVITY--PHYSIOLOGICAL EFFECT)

S/239/62/048/002/002/002  
I015/I215

AUTHOR: Moskalenko, Yu. Ye.

TITLE: Optimal conditions for the electroplethysmographical recording of human body regions and organs

PERIODICAL: Fiziologicheskiy zhurnal SSSR im. I.M. Sechenova, v. 48, no. 2, 1962, 214-218

TEXT: The selection of optimal biophysical conditions for electroplethysmographic recording is still an unsolved problem. Experiments on man confirmed the theoretical biophysical considerations that the frequency and voltage are the critical electrical parameters in obtaining optimal results. It was found, by using an apparatus set of ZG-11 generator, MPP-300 bridge and EO-7 and MPO-2 oscilloscopes, that a frequency of 100-150 kcyc/min and a voltage of 3v on the bridge (not more than 2v on the electrodes) were optimal conditions. There 3 tables and 3 figures.

ASSOCIATION: Institut evolusionnoy fiziologii im. I. M. Sechenova AN SSSR, Leningrad (Institute of Evolutionary Physiology im. I. M. Sechenov. AS USSR. Leningrad).

SUBMITTED: February 19, 1961.

Card 1/1

17039464 1478  
AID Nr. 980-13 31 May

HEMODYNAMICS OF BRAIN DURING VARIATIONS IN GRAVITATIONAL-FIELD  
DIRECTION (USSR)

Moskalenko, Yu. Ye., N. N. Benua, and O. V. Graunov. Fiziologicheskiy  
zhurnal SSSR imeni I. M. Sechenova, v. 49, no. 4, 1963, 405-411.

S/239/63/049/004/001/001

Experiments have been conducted with rats to study changes in intracranial hemodynamics after placing the body in different spatial positions in the vertical plane. EPG made with the head down showed increased resistance in the cranial cavity. The amplitude of pulse oscillations decreased slightly after the position was changed, then rose above the initial level and sometimes remained at the higher level after the body assumed the normal position. The amplitude of respiratory waves also increased. With the head up intracranial electrical resistance decreased, the amplitude of pulse oscillations was usually unchanged, and the amplitude of respiratory waves decreased. The EPG showed marked intensification of waves of the third order. Changes in the electrical resistance of the cranial cavity indicated that the brain was filling with blood. The dynamics of blood filling after changes in the direction of the gravitational field indicated a regulatory action. Fluctuation in the brain's vascular tonus indicated the relative autonomy of homeostasis in the brain.

[AB]

Card 1/1

GRANAT, L.N.; MIGRELISHKO, Yu.Ye.

Changes in the hemodynamics in the canine heart during exposure of heat and cold stimulation. Vopr. Kardiol. 1965, No. 11, p. 165.

• Institut kardiologii i vaskul'arnoi byologii im. N. P. Pecherskogo na vserossiyskom gil'dii po issledovaniyu serca i perifericheskikh periferii.

L 11785-66 EWT(1)/FS(v)-3 SCTB DD

ACC NR: AP6001111

SOURCE CODE: UR/0239/65/051/012/1474/1477

AUTHOR: Shurubure, A. A.; Barbashova, Z. I.; Moskalenko, Yu. Ye.

ORG: Institute of Evolutionary Physiology im. I. M. Sechenova, AN SSSR, Leningrad  
(Institut evolyutsionnoy fiziologii AN SSSR)

TITLE: Cerebral blood flow in hypoxia-adapted rats subjected to acceleration

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 12, 1965, 1474-1477

TOPIC TAGS: acceleration, blood circulation, animal physiology, hypoxia, gravitation field, dynamic stress, centrifugation

ABSTRACT: Electroplethysmography was employed to study cerebral blood-flow dynamics in rats adapted to hypoxia in a pressure chamber for a month and then subjected to positive and negative horizontal acceleration of up to 2g for 10–30 sec. Plethysmographic changes in the adapted rats and in control rats exposed to acceleration of 1.2–1.4 g, which causes the blood to flow out of the head, were essentially the same. Above 1.5 g, the controls showed a distinct active physiological reaction directed to normalizing the blood flow in the cranial cavity within 2–5 sec of exposure. An increase in acceleration to 1.8–2.0 g caused the physiological component of the reaction to appear immediately after exposure and increased the volume of blood in the cranial cavity. In the rats adapted to hypoxia, this compensatory physiological reaction appeared much

Card 1/2

UDC: 612.133

L 11785-66

ACC NR: AP6001111

later, starting with acceleration of 1.8-2.0 g. The respiratory waves on the EPG for adapted animals showed little change following acceleration, whereas over 1.5 g, the amplitude of these waves in the controls decreased substantially. The superior tolerance of acceleration in the adapted rats is indicative of little change in respiration during and after exposure, a sign of marked resistance by cells in the respiratory center of the brain. The authors ascribe the high resistance to horizontal acceleration in the hypoxia-adapted animals to changes in the cerebral blood vessels and in cellular metabolism. These changes include increased oxygen consumption by brain cells with low partial pressure of oxygen, intensification of anaerobic glycolysis, and a nonspecific increase in resistance of the structure of the cellular elements subject to injury. The authors suggest that adaptation to hypoxia might be used as a means of conditioning the body to acceleration. Orig. art. has: 3 figures. [14]

SUB CODE: 06/  
ATD PRESS: 480

SUBM DATE: 30Dec63/ ORIG REF: 008/ OTH REF: 003

HW  
Card 2/2

ACCESSION NR: AP4026727

S/0216/64/000/002/0280/0297

AUTHOR: Moskalenko, Yu. Ye.; Gazeiko, O. G.; Shurubura, A. A.;  
Kas'yan, I. I.; Graunov, O. V.

TITLE: Dynamics of hemocirculatory parameters of the cerebrovascular system during longitudinal gravitational loads

SOURCE: AN SSSR. Izv. Seriya biologicheskaya, no. 2, 1964, 280-297

TOPIC TAGS: cerebral blood circulation, cerebrovascular hemocirculatory system, gravity acceleration, longitudinal gravitational load, blood pressure change, blood volume change, electroplethysmograph, data unit electrical system, cerebrospinal blood pressure change, central nervous system development, respiration movement, brain oxygen intensity, gravitational load sensitivity threshold, cerebrovascular mechanical regulation, cerebrovascular chemical regulation

ABSTRACT: In a series of 64 experiments changes in blood volume and pressure were studied in the cerebrovascular systems of dogs, cats, rabbits, and rats. In each of the experiments the animal was subjected to 15-20 tests on a rotating stand with longitudinal

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ACCESSION NR: AP4026727

gravitational loads up to + 1 g, and in some experiments animals were tested on a centrifuge with acceleration up to 10 g. Blood volume changes were measured by electroplethysmograph and blood pressure changes were recorded by tensiometric manometers. Arterial pressure and respiratory movement were measured by data units, and oxygen intensity in the brain was determined by a polarographic method. Readings for all data units were registered on a K 12 21 oscillograph. Results show that the sensitivity threshold of the cerebrovascular system to longitudinal gravitational loads lies within limits of 0.2 to 0.5 g, depending on central nervous system development and the ecology of the animal. The active physiological reactions of the cerebrovascular system 5-10 sec after exposure to longitudinal gravitational loads are autoregulatory, with arterial pressure changes affecting vessel tone. With lack of oxygen and CO<sub>2</sub> accumulation in the brain 15-25 sec after exposure, compensatory reactions of a chemical regulatory nature appear. Orig. art. has: 13 figures, 3 tables.

ASSOCIATION: Institut evolyutsionnoy fiziologii im. I. M. Sechenova AN SSSR (Institute of Evolutionary Physiology AN SSSR)

Card 2/3

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SUBMITTED: 14Sep63

DATE ACQ: 22Apr64

ENCL: 00

SUB CODE: AM

NO REF Sov: 009

OTHER: 022

Card 3/3

STEPANYAN, Ye. P.; MOSKALENKO, Yu. D.; KOSORUKOVA, N. Ya.

Prevention of thromboembolic complications in lung cancer. Grud.  
(MIRA 15:2)  
khir. no.5:89-94 '61.

1. Iz biokhimicheskoy laboratorii (zav. - doktor biologicheskikh  
nauk Ye. P. Stepanyan) i otdeleniya zabolеваний легких (zav. -  
doktor meditsinskikh nauk N. I. Gerasimenko) Instituta grudnoy  
khirurgii (dir. - prof. S. A. Kolesnikov, nauchnyy rukovoditel' -  
akad. A. N. Bakulev) AMN SSSR. Adres avtorov: Moskva, Leninskiy  
prosp., d. 8. Institut serdechno-sosudistoy khirurgii AMN SSSR.

(LUNGS—CANCER) (EMBOLISM)

MOSKALENKO, Z.D.; FREYDIN, A.I.

Stratigraphy of Jurassic and Cretaceous sediments in the upper  
Amur Valley (Urka, Ol'doy, B.Never, and Burinda basins). Zap.  
(MIRA 18:3)  
LGI 47 no.2:3-13 '64.

PORTRYAGIN, N.A. & OOKALINKO, Z.D.

Role of deep faults in the Mesozoic structure of the upper  
Saur Valley. Geol. stor. [Lvov] no. 9:94-107 '65.  
(HLA 18:12)

MOSKALETS, A.A., inzh.; MIKHAYLENKO, P.A., tekhnik

Circuit for conveyor stopping by means of control push buttons  
mounted on the cutter loader. Ugol.prom. no.5:68-69 S-0 '62.  
(MIRA 15:11)

1. Shakhta No.6-14 Krasnogvardeyskogo tresta ugol'nykh  
predpriyatiy Donbassa.  
(Conveying machinery) (Remote control)

PROKOYEV, V.N.; MUKARETS, E.P.

Ectoparasites from the nests of house martins of the Obshchaya  
River bank cliffs southwestern Transbaikalia. Dozdr. Izk. gos.  
nauk.-issl. protivoochur. Inst. no. 52186-187 '63  
(MIRA '1861)

MOSKALETS, K.

Mere initiative in trade-union werk. Sov.profsoiuzy 4 no.3:  
20-24 Mr '56. (MIRA 9:7)

1.Predsedatel' Ukrainskogo respublikanskogo soveta profsoyuzov.  
(Ukraine--Trade unions)

MOSKALETS, K.

Great rise in the productive activity of Ukrainian workers.  
Sots.trud no.10:51-60 O '57. (MIRA 10:11)

1. Predsedatel' Ukrainskogo respublikanskogo Soveta profsoyuzov.  
(Ukraine--Efficiency, Industrial)

KOSHELETS, K.

Administration of the branch committees under the new conditions. Sov.profsoiuzy 6 no.17:49-54 D '58. (MERA 12:1)

1. Predsedatel' Ukrainskogo respublikanskogo soveta profsoyuzov.  
(Ukraine--Trade unions)

MOSKALETS, K.E.

Interview. Support by all means mass inventing. Izobr. i rats.  
no.10:8-9 0 '58. (MIRA 11:11)

1. Predsedatel' Ukrainskogo respublikanskogo soveta profsoyuzov.  
(Efficiency, Industrial)

MOSKALETS, K. F.

Toward the new glorious achievements. Okhr.truda i sots.strakh.  
no.5:8-13 Ky '59. (AIRA 12:9)

1. Predsedatel' Ukrainskogo respublikanskogo soveta profsoviizov,  
chlen Prezidiuma Vsesoyuznogo tsentral'nogo soveta professional'-  
nykh soyuzov. (Ukraine--Trade unions)

MOSKALETS, Konstantin Fedorovich [Moskalets', K.]: SUSHCHUK-SLYUSARENKO,  
Z., red.; KOPITKOWA, N. [Kopytkova, N.], tekhn.red.

[Trade unions of the Ukraine struggle for the carrying out of the  
seven-year plan] Profspilky Ukrayny v borot'bi za zdiisnenia  
semirichky. Kyiv, Derzh.vyd-vo polit.lit-ry, 1960. 89 p.  
(MIRA 13:6)

(Ukraine--Trade unions) (Efficiency, Industrial)

MOSKALETS, K. I.

MOSKALETS, K. I. -- "Protection from Leakage for Branched Electrical Circuits of Sections of Coal Pits." Min Higher Education Ukrainian SSR, Donets Order of Labor Red Banner Industrial Inst imeni N. S. Khrushchev, Stalino, 1955 (Dissertation For the Degree of Doctor of Technical Sciences)

SO: Knizhnaya letopis', No. 37. 3 September 1955

MOSKALETS K.I.  
LEYBOV, R.N., prof.; MOSKALETS, K.I., kand.tekhn.nauk

Preventing current leakage. Bezon.truda v prom. 2 no.4:5-8 Ap '58.  
(MIRA 11:4)

1. Donetskiy industrial'nyy institut.  
(Electricity in mining)

MOSKALETS, K.I., kand. tekhn. nauk.

Conditions providing for safety in the operation of the electric  
system in Moscow Basin mines. Izv. vys. ucheb. zav.; gor. zhur.  
no.8:114-121 '58. (MIRA 12:5)

1. Donetskiy industrial'nyy institut.  
(Moscow Basin--Electricity in mining)

KOSKAETS, K.I., kand.tekhn.nauk

Protection from leakage in forked electric circuits of non-gaseous mine sections. Izv.vys.ucheb.zav.; gor.zhur. no.10: 116-122 '58. (MIRA 12:8)

1. Donetskii industrial'nyy institut.  
(Electricity in mining) (Electric currents, leakage)

MOSKALETS, L. I.

Hardening files on sonic frequencies. Stan.i instr. 29 no.1:  
25-26 Ja '58. (MIRA 11:1)  
(Metals--Hardening)  
(Induction heating)

MOSKALETS, N. D., SEYAI', L. S., MESCHCHIKOV, V. M., KULINICH, I. M.

"Epidemiological characteristics of the focus of tick-borne encephalitis in the Transcarpathian oblast." Page 94

Desyatoye soveshchaniiye po parazitologicheskim problemam i prirodnym boleznyam. 22-29 Oktyabrya 1959 g. (Tenth Conference on Parasitological Problems and Diseases with Natural Foci 22-29 October 1959), Moscow-Leningrad, 1959, Academy of Medical Sciences USSR and Academy of Sciences USSR, No. 1 254pp.

MOSKALETS N.D.

Studies on synanthropic flies in Uzhgorod in the Transcarpathian region of the Ukraine. Med.paraz.i paraz.bol. 29 no.5:575-578 S-O '60. (MIRA 13:12)

1. Iz Zakarpatskoy oblastnoy sanitarno-epidemiologicheskoy stantsii (glavnnyy vrach G.K. Tokach).  
(UZHGOROD—FLIES)

KOMAROV, N.G., nauchnyy sotrudnik; FOKIN, A.D., nauchnyy sotrudnik;  
BASHEMAKOV, A.I., nauchnyy sotrudnik; RUDAKOVA, A.G., nauchnyy  
sotrudnik; MOSKALETS, Ye.S., nauchnyy sotrudnik; MEDEL'SKIY,  
V.I., red.; PORFIR'YEV, B.A., red.; SELYAROVA, Ye.I., tekhn.red.

[City of Kirov; reference book] Gorod Kirov; spravochnik. Kirov,  
Kirovskoe knizhnoe izd-vo, 1957. 150 p. (MIRA 13:8)

1. Kirovskiy oblastnoy krayevedcheskiy muzey (for Komarov, Fokin,  
Bashmakov, Rudakova, Moskalets). 2. Direktor Kirovskogo oblastnogo  
krajevedcheskogo muzeya (for Nedel'skiy).  
(Kirov)

KOMAROV, N.G.; SOBOLEV, V.A.; BASHMAKOV, A.I.; EMMAUSSKIY, A.V., kand.  
istor.nauk; BUDAKOVA, A.G.; MOSKALETS, Ye.S.; KUSHNEREV, K.Ya.;  
KOSHCHAKOV, V.A.; KARDAKOVA, Ye.A., red.; SKLYAROVA, Ye.I.,  
tekhn.red.

[City of Kirov; a reference book] Gorod Kirov; spravochnik.  
Kirov, Kirovskoe knizhnoe izd-vo, 1959. 166 p.

(MIRA 13:6)

(Kirov--Guidebooks)

MOSKALEV, A.

Methodological commissions and sections in operation. Prof.-tekhn.  
obr. 20 no.7:28-29 Jl '63. (MIRA 16:10)

1. Zamestitel' nachal'nika otdela tekhnicheskogo obucheniya  
Moskovskogo avtozavoda imeni I.A.Likhacheva.

J. 44009-66 EWP(w)/T-2 IJP(c) W/TCH/EM  
ACC NR: AP6029940

SOURCE CODE: UR/0413/66/000/015/0102/0102

INVENTOR: Besyadovskiy, Ye. K.; Moskalev, A. A.

ORG: none

TITLE: A system for remote measuring of the rigidity of flexible couplings in dynamically similar aircraft models. Class 42, No. 184494

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 102

TOPIC TAGS: measuring apparatus, scale model, wind tunnel instrumentation

ABSTRACT: An apparatus for measuring the <sup>rigidity</sup> of flexible couplings in dynamically similar aircraft models during <sup>wind tunnel tests</sup> is described. The apparatus contains an electric motor with a reductor which rotates the propeller fastened to two support bearings, and a panel with a busbar and electric contacts. The propeller is equipped with a shoe which on its upper portion has an interchangeable sleeve with various calibrated openings for wire (springs). On its lower portion, it has a balance arm with reciprocal contacts. After the shoe has moved a certain distance on the panel, the above contacts switch off the electric motor and thereby a preset wire length is fixed. This apparatus not only decreases the time necessary for an experiment but also increases the accuracy of results obtained. [BD]

SUB CODE: 01/ SUBM DATE: 04Jan65/ ATD PRESS: 5070

Card 1/1 CC JDC: 620.178

ACC NR: AM602908

Monograph

UR/

Moskalev, Aleksandr Dmitriyevich (Colonel, Candidate of Military Sciences)

Radiation conditions and troop operations (Radiatsionnaya obstanovka i deystviya voysk) Moscow, Voenizdat M-va obor. SSSR, 1966. 103 p. illus., tables, 15,000 copies printed.

TOPIC TAGS: radiation protection, radioactive contamination, ionizing radiation, radiation dosimetry, radioactive fallout, military operation, nuclear weapon biologic effect

PURPOSE AND COVERAGE: Radioactive contamination differs significantly from other harmful effects of nuclear weapons: it is distributed over large areas, remains active for a long time, and has specific effects on the human organism. This booklet describes what consideration should be given to radioactive conditions, and what measures should be taken in the presence of radioactive contamination. The physical bases of radioactive contamination, the estimation of radiation conditions, and rules for action in contaminated areas are covered. It is intended for military personnel.

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UDC: 355.421:613.648

ACC NR: AM602908

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ACC NR: AM602908

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SUB CODE: 06, 18/ SUBM DATE: 03Nov65/

Card 3/3

DUBOVIK, V.N., st. prepodav.; MAMIN, A.U.. kand. geol.-miner.  
nauk, dots.; OTTO, P.I.; RUMYANTSEVA, A.Ya., kand. geogr.  
nauk, 1spolnyayushchiy obyazannosti dots.; SEREGIN, I.A.,  
st. inzh.; MOSKALEV, A.F.; KOLESNIKOV, B.P., prof., doktor  
biol. nauk, rektor; OKOROKOV, V.I., kand. biol. nauk, dots.;  
KLIMENKO, R.A.; STARIKOVA, L.A., assistant; SHUMILOVA,  
V.Ya., assistant; MAKSIMOVA, Ye.A., dots.; KIRIN, F.V.,  
kand. geogr. nauk, dots.; KUZNETSOVA, A.V., red.; MATVEYEV,  
S.M., red.; MOLODOV, V.K., red.; RUMYANTSEV, I.M., red.;  
TYAZHEL'NIKOV, Ye.M., red.

[Nature of Chelyabinsk Province] Priroda Cheliabinskoi ob-  
lasti. Chelyabinsk, Ural'-skoe knizhnoe izd-vo, 1964.  
241 p. (MIRA 18:7)

1. Kafedra geografii Chelyabinskogo pedagogicheskogo in-  
stituta (for Dubovik, Mamin, Rumyantseva, Kirin). 2. Nachal'-  
nik geologicheskogo otdela Chelyabinskogo geologorazvedoch-  
nogo tresta (for Otto). 3. Chelyabinskaya gidrologicheskaya  
stantsiya (for Seregin). 4. Nachal'nik pochvennoy parti  
Chelyabinskoy zemleustroitel'stvoj ekspeditsii (for Moskalev).  
5. Institut biologii Ural'skogo filiala AN SSSR (for Kolesnikov).  
6. Kafedra zoologii Chelyabinskogo pedagogicheskogo instituta  
(for Okorokov, Starikova, Shumilova). 7. Chelyabinskij rybnyy  
trest (for Klimenko).

MOSKALEV, A. G.

"Automatic Frequency Regulation in Power Systems."  
Thesis for degree of Cand. Technical Sci. Sub 27  
Jun 49, Moscow Order of Lenin Power Engineering Inst  
imeni V. M. Molotov.

Summary & 18 Dec 52, Dissertations Presented  
for Degrees in Science and Engineering in Moscow  
in 1949. From Vechernaya Moskva, Jan-Dec 1949.

USSR/Electricity - Frequency Regulators Jul 51  
Magnetic Amplifiers

"The Magnetic-Filter Frequency Regulator (MFRCh-1)"  
A. G. Moskalev, Cand Tech Sci, Prof I. I. Solov'-  
yev, Cen Sci Res Elec Eng Lab of Min of Elec Power  
Stations

"Elektrichesvo" No 7, pp 11-18

This frequency regulator, for which Moskalev has  
been awarded Certificates of Authorship No 70439  
and 87778, is based on the use of a band filter  
and magnetic amplifiers and does not contain moving  
elements or electron tubes. Tests of the 1st

199715

USSR/Electricity - Frequency Regulators Jul 51  
(Contd)

set of regulators in power systems has shown that  
they are very efficient and reliable and that the  
measuring element is very stable. Submitted  
17 Jan 51.

199715

MOSKALEV, A. G.

MOSKALEV, A. G.

## PHASE I

## TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 462 - 1

## BOOK

Author: MOSKALEV, A. G.

Call No.: TK2851.M6

Full Title: AUTOMATIC FREQUENCY CONTROL IN INTERCONNECTED POWER SYSTEMS

Transliterated Title: Avtomaticheskoye regulirovaniye chastoty v energosistemakh

## PUBLISHING DATA

Originating Agency: None

Publishing House: State Power Engineering Publishing House

Date: 1952

No. pp.: 175

No. of copies: 5,000

Editorial Staff: None

## TEXT DATA

Coverage: The book describes problems of automatic frequency control in interconnected power systems: the influence of frequency fluctuations upon the performance of the power system, principles of selection of generating units and stations for frequency regulation, characteristics of separate elements of frequency regulators, and stability of the process of control. Three original Soviet designs of frequency regulators used in power systems are described. The importance of automatic control for large hydropower developments is emphasized by the author. Kuybyshev, Stalingrad, Tsimlyanskaya and several other large hydroelectric power plants already operating or under construction,

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Avtomaticheskoye regulirovaniye chastoty v  
energosistemakh

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form the great interconnected power system of the European part of the USSR. The automation of production processes and automatic control and regulation make that rapid development possible.

The book contains many diagrams and graphs.

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energosistemakh

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energosistemakh

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Avtomatuskoye regulirovaniye chastoty v  
energosistemakh

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power systems, characteristic equations for separate circuits of the control system; circuit analysis according to Mikhaylov and Nyquist-Mikhaylov criteria; stability analysis of the regulatory process with a MFRCh-201 type regulator; influence of types of turbines, and speed and load governors upon the stability of the frequency regulation process. 152-166

Ch. XIV Methods of determining the characteristics of certain circuits of regulatory systems. 167-170

Appendix: Dynamic characteristics of some generators, turbines and water wheels of Soviet production. 171-172

Purpose: The book is written for engineers and technicians working in the field of automatic control in general, and load and frequency control in interconnected power systems in particular.

Facilities: Names of Russian scientists and engineers, specialists in the field of automatic control, appear in the text.

No. of References: Total 58, all Russian (1, 1877; 9, 1934-1939; and 48, 1940-1951).

Available: Library of Congress.

5/5

MOSKALEV, A. G.

232T52

USSR/Electricity - Power Systems  
Frequency Stability

Sep 52

"Frequency Characteristics of Electric Power Systems," A. G. Moskalev, Cand Tech Sci, TsNIEL, Min of Elec Power Stations

"Elektrichestvo" No 9, pp 35-40

Results of a study of steady-state and transient frequency fluctuations in a power system when the power balance is disturbed. Gives an eq for the dynamics of the turbogenerator unit, which eq greatly simplifies the study and calcn of transients. Submitted 15 Mar 52.

232T52

1. SOLOV'YEV, I. I., PROF., STYLIDSON, S. D., ENG., KRIKUNCHIK, A. B., ENG., KHOMUTOV, B. A., ENG., MOSKALEV, A. G., ENG., POPOV, I. N., ENG., TSAREV, M. I., ENG.
2. USSR (600)
4. Electric Circuits
7. Remarks to Ye. L. Sirotinskiy's article "Symbols and rules for drawing schemes of relay protection and automaticity." Eletrichestvo no. 11, 1952.
9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

MOSKALEV, A.G.

Oct 19

"The measuring elements of frequency regulators," A. G. Moskalev, Central  
Scientific Electrical Lab, Ministry of Electric Power Stations

Avtomat i Telemekh, Vol 13, No 5, p. 541-560

An analysis of various types of measuring elements for frequency regulators, e.g., AC circuits, RC circuits, LC and R circuits, frequency bridges (used in Leeds and Northrup regulators), etc. This analysis was performed in connection with the development of a frequency regulator at the author's inst. The latter regulator makes use of a differential circuit consisting of an input transformer and solid rectifier bridges with the output of a frequency filter connected to the mid-point of the two rectifier bridges. Submitted

10 May 1950

MOSKALEV, A.G.

[How to read an electric installation diagram] Kak chitat' elektricheskie  
schemy. Moskva, Gos.energ.izd-vo, 1953. 86 p. (MLR 6:7)  
(Electric wiring--Diagrams)

MOSKALEV, A. G.

Electrical Engineering Abstracts  
May 1954  
Measurements

*End Tech Sci*  
*TS NIEL MESEP*

(1) Elec

1953. Frequency recording for the determination of dynamic frequency characteristics of power systems.  
A. G. MOSKALEV. Elektrichesivo, 1953, No. 8, 14-15.  
In Russian.

The dynamic frequency characteristics of power systems are important for the design, adjustment and operation of frequency regulators, synchronizing gear for the generators, frequency-controlled load-shedding devices and other automatic equipment of modern power stations. The conventional types of frequency recorders are far too crude and fail to record important details of the frequency variations. The circuit described is a rectifying differential circuit with frequency filters converting the frequency variations into voltage variations which are then recorded by a c.r.o. Frequency differences down to 0.01 c/s may be recorded.

D. F. KRACZ

MOSKALEV, Aleksandr Gerasimovich, kandidat tekhnicheskikh nauk; DEMIEOV,  
Ye.D., redaktor; VORONIN, K.P., tekhnicheskiy redaktor

[How to read diagrams for electric wiring] Kak chitat' elektricheskie  
skhemy. Izd. 2-oe, perer. Moskva, Gos. energ. izd-vo, 1957. 87 p.  
(Electric wiring--Diagrams) (MLRA 10:3)  
(Electric engineering--Notation)

8(6)

SOV/112-58-3-3890

Translation from: Referativnyy zhurnal. Elektrotehnika, 1958, Nr 3,  
pp 55-56 (USSR)

AUTHOR: Moskalev, A. G.

TITLE: On the Problem of an Automatic Frequency Control Effected by a Multiunit  
Power Station (K voprosu avtomaticheskogo regulirovaniya chastoty  
mnogoagregatnoy stantsiye)

PERIODICAL: Tr. Vses. zaochn. energ. in-ta, 1957, Nr 7, pp 183-196

ABSTRACT: Well-known practical methods of automatic frequency control by the  
active-load distribution among generators are presented.

Card 1/1

MOSKALEV, A.G. , dotsent, kand.tekhn.nauk

Integrated automatic-control system for thermal electric power  
plants. Trudy VZET no.9:26-40 '58. (MIRA 12:10)  
(Electric power plants) (Automatic control)

MOSKALEV, A.G., docent, kand.tekhn.nauk

Automatic control of the excitation, voltage, and reactive-power  
output. Trudy VZET no.9:41-55 '58. (MIRA 12:10)  
(Electric generators) (Automatic control)

8(3)14( 6)28(1)

PHASE I BOOK EXPLOITATION

SOV/2231

Moskalev, Aleksandr Gerasimovich

Avtomatischekaya chastotnaya razgruzka energeticheskikh sistem  
(Automatic Frequency-Controlled Unloading of Power Systems)  
Moscow, Gosenergoizdat, 1959. 159 p. 6,800 copies printed.

Ed.: N.A. Mel'nikov,; Tech. Ed.: G.I. Matveyev.

PURPOSE: This book is intended for engineering personnel of power systems and design organizations. It may also be used as a reference book by scientific workers and students of power- and electrical-engineering departments of vuzes. It is also recommended as a textbook for engineers, members of the advanced-study department of the All-Union Correspondence Power Institute.

COVERAGE: The author studies problems of power unbalance occurring in a power system and discusses the automatic disconnection of loads during unbalance. He also discusses the static frequency characteristics of load equipment, turbogenerators, and the power system in general and presents the dynamic

Card 1/7

PLEASE I BOOK EXPLOITATION

SOV/3870

Moskalev, Aleksandr Gerasimovich

Avtomicheskoye regulirovaniye rezhima energeticheskoy sistemy po chastote i aktivnoy moshchnosti (Automatic Control of Power System Operating Conditions Based on Frequency and Active Power) Moscow, Gosenergoizdat, 1960. 239 p. Errata slip inserted. 8,000 copies printed.

Ed.: N.A. Mel'nikov; Tech. Ed.: G.Ye. Larionov.

PURPOSE: This monograph is intended for technicians and scientists engaged in designing and developing automatic controls of the operating conditions of electric power plants and systems. It can also be used by aspirants desiring to improve their knowledge in this field, and is recommended as a textbook for students of the Department of Graduate Engineers' Advanced Training in the All-Union Correspondence Institute of Power Engineering.

COVERAGE: The book examines the following problems: effect of frequency change on the operating efficiency of power systems and Card 1/11 on the consumption of electric energy, most efficient distribution

*MOSKALEV, A.G.*

## PLATE 1 BOOK EXPOSITION

207.1.11

Konferentsiya voprosam teorii i prikladnoj elektronike diskretnykh avtomaticheskikh sistem.  
Moskva, 1964

Teoriya i prikladnoye issledovaniye avtomaticheskikh sistem: trudy Vsesoyuznogo  
("Doktry") konferentsii. Moscow, 14 iyun' 1963. 1000 copies printed.

Sponsoring Agency: Akademicheskaya Nauka SSSR. Publishing Agency: Naukova Dumka.

Editorial Board: M.A. Gor'kin, Doctor of Technical Sciences; Yu.F. Dobrovolskiy,  
Doctor of Technical Sciences; T.M. Kozlovskaya, Candidate of Technical Sciences;  
A.R. Lerner, Doctor of Technical Sciences; A.I. Piatnitskii, Doctor of Technical  
Sciences; G.S. Popovskii, Doctor of Technical Sciences; and Ya.I. Teplykh,  
Scientist. Inv. Bureau Sovzeta RKP(B). Ed. T.M. Teplykh, Doctor of Technical  
Sciences; Director of Publishing House: M.M. Podgoretskii; Inv. Ed.: S.D. Markovich.

Scientists: Ed. of Publishing House: M.M. Podgoretskii; Inv. Ed.: S.D. Markovich.

PURPOSE: These transactions are intended for the members of the conference and  
other specialists in automatic control.

CONTENTS: The Conference took place in Moscow from June 12 to 14, 1963. It was  
organized by the Institute of Mathematics and Cybernetics of the Academy of Sciences of the Soviet  
Union. The Conference was organized to discuss problems of the present status of the theory  
and techniques of discrete automatic systems and to stimulate further development  
of the present research in the conference have been divided into four groups:  
1) the first group deals with particular plant (e.g. control systems in which are  
realized optimal processes); 2) the second group deals with various problems  
connected with the analysis and synthesis of pulse systems with various parameters;  
3) the third group deals with problems of the study of properties of  
pulse system via numerical experiments; 4) the fourth group deals with problems of  
planning and organization of work in the field of discrete systems and their applications.  
The papers were presented in two parts: theoretical and practical. Theoretical papers  
discuss general methods of investigating steady state conditions in  
discrete systems, methods of solving the problem of synthesis of discrete systems, and  
problems of planning and organization of work in the field of discrete systems.  
Practical papers present results of solving problems of synthesis and realization of  
discrete systems, and also give examples of applications of discrete systems in  
various fields of industry. Some of the papers contain general information on the  
theory and methods of synthesis and realization of discrete systems, and others contain  
information on the results of solving specific problems in the field of discrete  
systems. Some of the papers contain general information on the theory and methods of  
synthesis and realization of discrete systems, and others contain information on  
the specific problems.

## III. BIBLIOGRAPHY

Bogolyubov, A.N., Berezin, N.I. Possibility of Applying Discrete Devices for Auto-  
matic Control. Trudy nauchno-tekhnicheskoi konferentsii po avtomaticheskim

systemam. Moscow, 1963. 27

SPINER: The author enumerates several factors which influence the economical opera-  
tion of electric power systems. He gives examples of several areas of ap-  
plication of digital computers in Power Systems for taking these factors  
into consideration either on a continuous or a periodical basis. There are  
no references.

LITABASHI, D.M., and M.Ian. Bortsevskii (Lipov). Use of Discrete Counting  
Components in Systems of Electric Power Control. Trudy nauchno-tekhnicheskoi konfe-  
rentsii po avtomaticheskym sistemam. Moscow, 1963. 27

MULTIROPE BOLES ARE WIDELY USED IN THE SOVIET MINING INDUSTRY. FOR DEEP-  
DRAFT OPERATION IN DEEP SHAFTS, THE BOLES HAVE TO BE EQUIPPED WITH DEPTH  
INDICATORS AND A MEASURING PULLEY TYPE COMPONENT OF THE REGULATING SYSTEM.  
THERE ARE 11 REFERENCES, ALL SOVIET.

DARLINGTON, J.H., and J.A. ALBRECHTSEN (Moscow). Prospects of Applying  
Electrical Control Machines in the Automation of Recording Radio-  
Television Stations in the Soviet Union and explains the principles of their auto-  
mation. There are 6 references: 5 Soviet and 1 English.

MOSKALEV, A. G. GORISHTEYN, V. M.

"Method of Optimum Load Distribution Among the Power Plants of an Electric System"

report presented at: The Madrid, Spain Sectional Meeting of World Power Conference, 5-9 June 1960.

MOSKALEV, A.G., kand.tekhn.nauk, dotsent

Self-aligning decentralized automatic control system for the  
regulation of an electric power system using frequency and active  
power. Elektrichestvo no.10:1-7 0 '60. (MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut elektroener-  
getiki. (Electric power distribution) (Automatic control)

MOSKALEV, A.G., kand.tekn.nauk (Moskva)

A method for calculating economic load distribution in a power system and the settings of the automatic frequency and real power control system using serially manufactured analog computers.  
Elektricheskno no.8:45-51 Ag '62. (MIR: 15:7)  
(Electric power distribution)  
(Electronic analog computers)

MOSKALEV, A.G., kand.tekhn.nauk, dotsent; ZEYLIDZON, Ye.D., inzh.;  
KUCHKIN, M.D., inzh.

Automatic control of the performance of large consolidated electric  
power systems according to their frequency and real power.  
(MIRA 16:10)  
Elektrichestvo no.9:81-87 S '63.

MOSKALEV, A.G., kand. tekhn. nauk, dotsent (Moskva)

Theoretical principles of optimum economic distribution of active  
and reactive loads in an automated electric power system.  
Elektrичество no.12:24-33 D '63. (MIRA 17:1)

U-41.

S/103/61/022/002/008/015  
B019/B060

9.2530 (also 1031)

AUTHORS: Lipman, R. A., Moskalev, A. I. (Moscow)

TITLE: Magnetic amplifier with self-excitation according to a voltage doubler circuit

PERIODICAL: Avtomatika i telemekhanika, v. 22, no. 2, 1961, 224-230

TEXT: A study has been made of a hitherto rather neglected circuit of a magnetic amplifier (for which see Fig. 16), by starting from the diagrams of the circuit variables (Fig. 2) during one period of the feed voltage, and from the dependence  $U_H = U_H(A_B)$  under the following conditions:

1) The feed voltage is sinusoidal. 2) The discharge time constant of the capacities  $C_1 = C_2 = C$  is considerably larger than the period of the feed voltage. 3) The voltage:  $R_H C \pi f$ , where  $f$  is the frequency of the feed voltage. 4) The loading time constant of the capacities  $C_1$  and  $C_2$  in saturated impedance coils is considerably smaller than the period of the saturation voltage:  $r_p C \pi f$ . Under these premises the following relations are obtained:

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B019/B060

Magnetic amplifier with ...

$$\Delta B_y / \Delta B_m = -\cos \theta_s - (\theta_s - \pi/2) \sin \theta_s \quad (14)$$

$$U_H / E_m = 2 \sin \theta_s \quad (16)$$

where  $\Delta B_m = 2B_m = 2E_m \omega_p S_c$  and  $E_m$  is the amplitude of the feed voltage. These expressions allow determining the voltage at the load as a function of induction changes in the core. Fig. 3 shows  $\theta_s$  and  $U_H$  as functions of  $\Delta B_y$ , calculated with the aid of (14) and (16) for the two circuits presented in Fig. 1. It further follows that the diagram examined here permits increasing the transconductance considerably as compared with the usual bridge circuit (by the 2.5-fold) and extending the working range of the characteristic of the amplifier in the case of unvaried impedance coil parameters and unvaried feed voltage. The drawbacks of these circuits are the higher sensitivity toward the forms of voltage and the amount of the internal resistance of the current feed. The smallest possible inner resistance is required in order to ensure the full benefit of the

Card 2/5

07-218

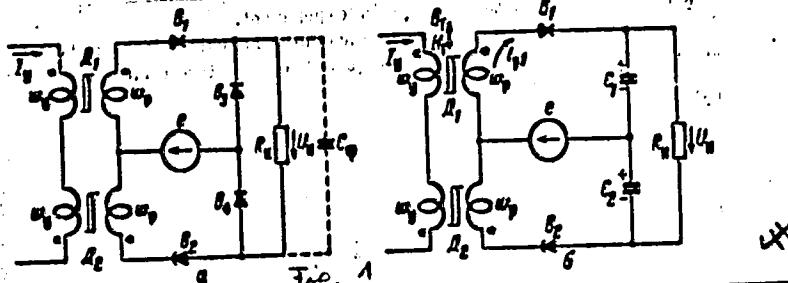
S/105/61/022/002/008/015  
B019/B060

## Magnetic amplifier with ...

advantages offered by this circuit. Such a circuit is best suited to serve as an operational magnetic amplifier. There are 6 figures and 2 non-Soviet bloc references.

SUBMITTED: June 18, 1960

Legend to Fig. 1: Magnetic amplifier with self-excitation and d-c output. 1a) bridge circuit, 1b) doubler circuit.



Card 3/5

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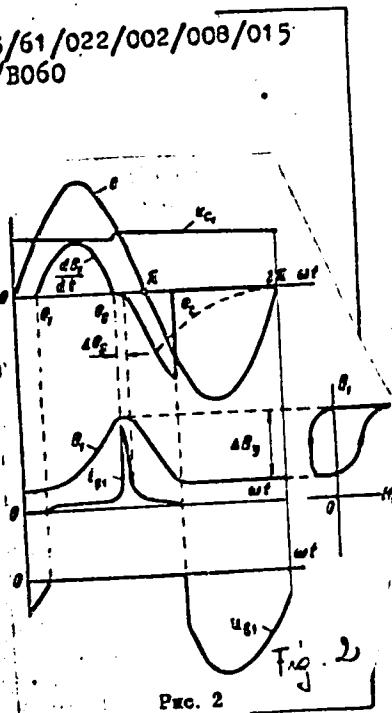
40

Magnetic amplifier with ...

S/105/61/022/002/008/015  
B019/B060

Legend to Fig. 2: representation of the variables of the circuit shown in Fig. 16 during one period of the feed voltage.

Card 4/5



Magnetic amplifier with ...

S/105/61/022/002/008/C15  
B019/B060

Legend to Fig. 3: dependence of the relative change of the output voltages (full lines) and the saturation angles of the circuits shown in Fig. 1a (Curves 1) and in Fig. 1b (Curves 2).

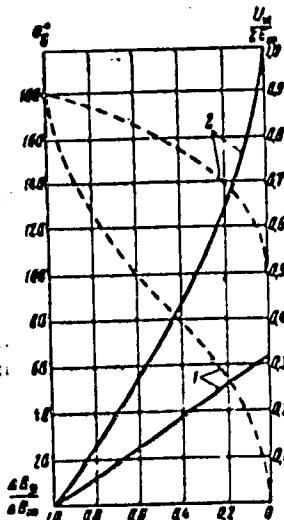


Fig. 3

Card 5/5

ACCESSION NR: AT4036420

S/0000/63/000/000/0313/0320

AUTHOR: Moskalev, A. I.

TITLE: A high-stability D. C. magnetic amplifier

SOURCE: Vsesoyuznoye soveshchaniye po ferritam i po beskontaktnym magnitnym elementam avtomatiki. 3d, Minsk. Ferrity\* i beskontaktnye elementy\* (Ferrites and noncontact elements); doklady\* soveshchaniya. Minsk, Izd-vo AN BSSR, 1963, 313-320

TOPIC TAGS: amplifier, magnetic amplifier, direct current amplifier, amplifier stability, single core magnetic amplifier, automation, control system

ABSTRACT: The author describes a two-cycle single-core direct-current magnetic amplifier, designed to perfect existing magnetic amplifiers whose zero points are susceptible to external influences (temperature, voltage etc.). The circuit of the amplifier (see the Enclosure) consists of a pulse voltage feeder, an amplifying choke with operating and control coils, an amplitude discriminator, a load resistance and a capacitance. Amplifiers, assembled on this pattern, involve no factors causing the zero-point instability which is characteristic of the existing amplifiers, i.e., unequal changes in the parameters of different cores with temperature and voltage. An extensive theoretical treatment of a

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ACCESSION NR: AT4035420

variety of operating conditions is given, such as the choice of a proper feed-pulse voltage, second integral, the core magnetic saturation and the process of reverse magnetization. The perfected amplifier showed a zero-stability of the order of  $1 : 10^{-13}$  v in a wide range of ambient temperature. Orig. art. has: 4 figures and 10 formulas.

ASSOCIATION: none

SUBMITTED: 04Dec63

DATE ACQ: 07May64

ENCL: 01

SUB CODE: EE, IE

NO REF SOV: 000

OTHER: 000

Card 2/3

ACCESSION NR: AT4036420

ENCLOSURE: 01

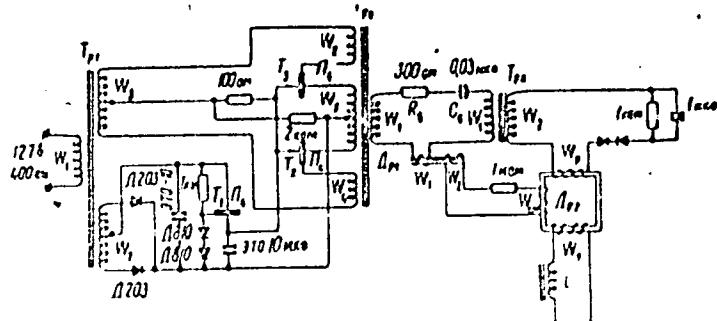


Fig. 1. Complete schematic diagram of a two-cycle D.C. magnetic amplifier with a single core.  $T_p$  = transformer;  $W$  = coil;  $A_p$  = choke coil.

Card 3/3

MOSKALEV, A.I.,(g. Sovetskaya gavan')

Spatula for carrying out of galvanocauterization of the palatal  
tonsils. Vest. oto-rin. 18 no.1:61 Ja-F '56. (MIRA 9:6)

(TONSILS) (SURGICAL INSTRUMENTS AND APPARATUS)

MOSKALEV, A.I.; SRVEEOV, N.I. (g.Nikolayev)

Use of diluted iodolipol for the X-ray study of the accessory  
sinuses of the nose. Zhur.ush., nos.i gorl.bol. 21 no.6:72 N-D  
'61. (MIRA 15:11)

(CONTRAST MEDIA) (NOSE, ACCESSORY SINUSES OF)

MOSKALEV, A. I.

"Serradella as a Forage and Leguminous Crop in the Belorussian SSR." Cand Agr Sci,  
Inst of Socialized Agriculture, Acad Sci Belorussian SSR, Minsk, 1954. (KL, No 3, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational  
Institutions (13)  
SO: Sum. No. 598, 29 Jul 55

Moskalev, A.I.

USSR/Cultivated Plants - Fodders.

L-4

Abs Jour : Ref Zhur - Biologiya, No 16, 25 Aug 1957, 69276

Author : Moskalev, A.I.

Inst :

Title : Seradella in Byelorussian SSR.

Orig Pub : Zemledelie, 1957, No 2, 85-86

Abstract : Experiments were conducted in the experimental station of the Institute of Socialist Agriculture in 1951 to 1953 on growing of seradella for green mass. The crop of the pure unmixed plant are low due to its wilting and choking. In mixtures with supporting plants (oats, annual ryegrass) the crops are considerably larger. The best results (up to 42.6 centners/hectare of hay) yield triple pelyushk-oat-seradella mixtures.

Card 1/1

MOSKALEV, A.I., kandidat sel'skokhozyastvennykh nauk.

Serradella. Nauka i pered.op.v sel'khoz. 7 no.6:42-43 Je '57.  
(MERA 10:7)

1. Grodzenskiy sel'skokhozyastvennyy institut, Belorusskaya SSR.  
(Serradella)

STRELKOV, I.G., doktor sel'khoz. nauk, glav. red.; KOVALENKO, I.F.,  
kand. sel'khoz. nauk, red.; SVIRITSKIY, Ya.N., kand. sel'-  
khoz. nauk, red.; MIKHALEV, Ya.K., kand. sel'khoz. nauk,  
red.; MOSKALEV, A.I., kand. sel'khoz. nauk; LAKIN, V.D.,  
red.; ZEN'KO, M.M., tekhn. red.

[Pulse crops] Zernobobovye kul'tury. Minsk, Gos.izd-vo  
sel'skokhoz. lit-ry BSSR, 1963. 246 p. (MIRA 17:1)

1. White Russia. Ministerstvo sel'skogo khozyaystva.  
(White Russia—Legumes)

ACCESSION NR: AT5011599

AT(d)/EST(1)/EMP(v)/EMP(k)/EMP(h)/EWA(h)/EMP(1) PF-4/Pi-4/Feb CS  
UR/0000/64/000/000/0021/0027 28  
24

AUTHOR: Fatyushin, V. A., Moskalev, A. I.

TITLE: Development of operational magnetic amplifiers

SOURCE: Vsesoyuznoye soveshchaniye po magnitnym elementam avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki, Lvov, 1962. Magnitnye elementy avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki (Magnetic elements of automatic control, remote control, measurement and computer engineering); trudy soveshchaniya. Kiev, Naukova dumka, 1964, 21-27

TOPIC TAGS: magnetic amplifier, magnetic amplifier design, amplifier drift, amplifier gain, magnetic control system, magnetic core, silicon rectifier

ABSTRACT: Various systems of automatic control and electronic computers which do not require too fast a response make extensive use of operational magnetic amplifiers. Several specialized circuits result in highly stable amplifiers with a sensitivity threshold of 10-14v or lower. However, such highly stable circuits have an amplification factor lower than standard amplifiers, exhibit quite large inertia, and require specially stabilized power supplies. While multistage magnetic amplifiers help increase the amplification factor (P. I. Kerbnikov,

Card 1/3

L 44289-65  
ACCESSION NO: A15011399

M. A. Rosenblat, Magnitnyye elementy automatiki, telemekhaniki, i emeriteley i vychislitel'noy tekhniki: trudy Soveshchaniya, Kiev, Naukova dumka, 1964, 16-20). It is practically impossible to design a multistage (larger than two) magnetic amplifier circuit with a sufficiently deep feedback. Consequently, the authors discuss the feasibility of satisfactory operational magnetic amplifier design based on ordinary circuits of magnetic DC amplifiers (MDCA) with self-magnetization. An improvement of the zero point stability together with increases in amplification factors may be achieved by utilizing thermally stable magnetic materials and high-quality silicon rectifiers, and choosing optimum magnetic core geometries. While earlier researchers searched for optimum core geometries from the standpoint of minimum size and weight for given heating conditions (see, e.g., M. A. Rosenblat, Avtomatika i telemekhanika, 1958, no. 8), the emphasis is now on an amplifier size which will yield a minimum sensitivity threshold and maximum amplification. The study covers magnetic amplifiers earmarked for operation with low-internal-resistance recording devices, amplifiers for operation with high-internal-resistance devices, and methods for increasing the slope of the input-output characteristic, and presents the results of experimental investigations in these areas.

Orig. art. has: 4 formulas, 3 figures, and 3 tables.

Card 2/3

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001135320017-8

L 44189-00  
ACCESSION NR: AT5011599

ASSOCIATION: None

SUBMITTED: 2980764

NO REF Sov: 008

ENCL: 00

OTHER: 001

SUB CODE: IX,LC

B4  
Card 3/3

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001135320017-8"

MOSKALEV, Andrey Ivanovich; NOVIK, A.Z., nauchn. red.; STEPANSKAYA,  
I.M., tekhn. red.

[Training adjusters of automatic machine-tool lines] Pod-  
gotovka naladchikov avtomaticheskikh linii stankov. Mo-  
skva, Proftekhizdat, 1962. 41 p.  
(MIRA 17:2)

MOSKALEV, A.Kh., former occupation

Active voluntary-inspection worker. Bezop.truda v prav. no.12:  
30-31 D '71.

1. Shukhta No.30 kombinata Vorkutugol'.  
(Vorkuta--Mine inspection)

76985  
SOV/56-37-6-25/55

16.8300, 16.7500

AUTHORS:

Dolginov, A. Z., Moskalev, A. N.

TITLE:

Relativistic Spherical Functions. III

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959,  
Vol 37, Nr 6, pp 1697-1707 (USSR)

ABSTRACT:

Equations for the wave function of a particle were expanded over irreducible representations of the Lorentz group. This yielded a relativistically invariant classification of the states. The connection between the various modes of realization of the irreducible representations was established. The form of operators  $H_\mu$  and  $F_\mu$  corresponding to the Lorentz group was obtained from the relation:

Card 1/4

## Relativistic Spherical Functions. III

76985  
SOV/56-37-6-25/55

$$H_{\pm}f = \pm \frac{1}{\sqrt{2}} e^{\pm i(\theta' - \theta)} \left\{ \pm \frac{\partial f}{\partial \theta} + \frac{i}{2} \operatorname{tg} \frac{\theta}{2} \frac{\partial f}{\partial \theta} + \frac{i}{2} \operatorname{ctg} \frac{\theta}{2} \frac{\partial f}{\partial \theta'} \right\},$$

$$H_0f = \frac{i}{2} \left\{ \frac{\partial f}{\partial \theta} - \frac{\partial f}{\partial \theta'} \right\},$$

$$F_{\pm}f = \pm \frac{1}{\sqrt{2}} e^{\pm i(\theta' - \theta)} \left\{ (i + n) \sin \theta f - i \cos \theta \frac{\partial f}{\partial \theta} \mp \frac{1}{2} \operatorname{tg} \frac{\theta}{2} \frac{\partial f}{\partial \theta} \pm \frac{1}{2} \operatorname{ctg} \frac{\theta}{2} \frac{\partial f}{\partial \theta'} \right\},$$

$$F_0f = (i + n) \cos \theta f + i \sin \theta \frac{\partial f}{\partial \theta}.$$
(10)

(cf. M. A. Naymark, Uspekhi mat. nauk, 9, 19, 1954).  
 To obtain the expansion of wave function  $\Psi_{\sigma}^{(p)}$   
 according to the irreducible concept, the function  
 $f(p)$  must be taken in the form:

$$f(\omega) = \sum_{lm=0}^{\infty} d\alpha_{lm}(n) \Psi_{nlm}(\omega).$$

With the aid of previously derived equations in  
 Parts I and II of this series of investigations (A. Z.  
 Dolginov, Zhur. eksp. i teoret. fiz., 30, 746, 1956;

Card 2/4

## Relativistic Spherical Functions. III

76985  
SOV/56-37-6-25/55

A. Z. Dolginov and I. N. Toptygin, ibid., 37, 11,  
1959), the following relation was derived:

$$u_{\mu\nu}^{(0)}(\eta, \lambda) \Psi_{nlm}(n) = \sum_{k_0} (-)^{l-l-k_0} (2J+2k_0+1) [(2l+1)/(2s+1)(2J+1)]^{1/4} \times \\ \times C_{lmkl}^{\mu\nu} W(JJsj; lJ+k_0) T_{lmks}^{nk_0}(\eta), \quad (48)$$

where

$$\eta = (\omega, \Omega_2) = (\Omega_1, \alpha, \Omega_2) \quad (49)$$

$$T_{lmks}^{nk_0}(\eta) = \sum_k D_{lk}^l(\Omega_1) D_{ks}^s(\Omega_2) Q_{nk_0\alpha}^{ls}(\alpha).$$

and

$$Q_{nk_0\alpha}^{ls}(\alpha) = \sum_{l=|J|-s}^{l+s} (2l+1) [(2j+1)/(2J+1)]^{1/4} W(JJ+k_0ls; jJ) \times \\ \times C_{j0/lk}^{ls} e^{i\alpha k} \Pi_l(n, \alpha). \quad (50)$$

(here,  $\sigma$  is spin variable;  $\lambda$  is projection of the  
particle spin; angles  $\Omega_2 \equiv (\varphi_2, \theta_2, \chi_2)$ )

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## Relativistic Spherical Functions. III

76985  
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determine the direction of the particle spin in the system at rest with  $OZ \parallel p$ ; angles  $\Omega_i \equiv (\varphi_i, \alpha_i)$  define the direction of the momentum  $p$  in the selected system of coordinates; the  $\alpha_i = v_i/c$ . There are 14 references, 10 Soviet, 4 U.S. The U.S. references are: G. Racah, Phys. Rev., 62, 438, 1942; A. Arima, H. Horie, Y. Tanabe, Prog. Theor. Phys. 11, 143, 1954; H. Matsunobo, H. Takebe, Prog. Theor. Phys. 14, 589, 1955; H. Bateman, Higher Trans. and Anti Functions, N. Y., 1953.

ASSOCIATION: Leningrad Phys.-Tech. Inst., Acad. Sciences, USSR  
(Leningradskiy fiziko-tekhnicheskiy institut, Akademii nauk SSSR)

SUBMITTED: June 25, 1959

Card 4/4

MOSKALEV, A.N., kand. tekhn. nauk; FILATOV, N.V., kand. tekhn. nauk;  
FEDIN, I.A., inzh.; POPOV, V.M., inzh.; BURIC, Ye.A., inzh.

Tests in cutting high-alloyed steels without flux. Svar.  
(MIRA 18:9)  
proizv. no.9:26-27 S '65.

1. Dnepropetrovskiy filial im. AN UkrSSR (for Moskalev).  
2. Sibirskiy metallurgicheskiy institut (for all except  
Moskalev).

IVANOV, V.N., kand.tekhn.nauk; MOSKALEV, A.N., inzh.

Research on the resistance to drilling and second crushing with jet  
torches of hard rocks from Gornaya Shoriya. Izv. vys. ucheb. zav.;  
gor.zhur. no.2:75-78 '61. (MIRA 14:3)

1. Sibirskiy metallurgicheskiy intitut (for Ivanov). 2. Vostochnyy  
nauchno-issledovatel'skiy gornorudnyy institut (for Moskalev). Reko-  
mendovana kafedroy gornykh mashin i rudnichnogo transporta  
Sibirskego metallurgicheskogo instituta.  
(Rock drills)

MOSKALEV, A.N., inzh.

Use of a circulating-type cooling system for thermal drilling rigs.  
(MIRA 15:4)  
Izv.vys.ucheb.zav.; gor.zhur. no.3:93-96 '61.

1. Sibirskiy metallurgicheskiy institut imeni S.Ordzhonikidze.  
Rekomendovana kafedroy gornykh mashin i rudnichnogo transporta  
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(Boring machinery--Cooling)

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Effect of the ring system for cooling a thermal drill with water and  
liquid fuel on rock breaking. Izv. vys. ucheb. zav.: gor. zhur.  
(MIRA 15:1)  
no.11:72-75 '61.

1. Sibirskiy metallurgicheskiy institut imeni S.Ordzhonikidze.  
Rekomendovana kafedroy gornykh mashin.  
(Boring)

BRICHKIN, A.V.; MOSKALEV, A.N., inzh.

Drillability of rocks using a single-nozzle jet under constant  
working conditions. Izv. vys. uch. zav.; gor. zhur. 5 no.6:  
71-77 '62. (MIRA 15:9)

1. Kazakhskiy politekhnicheskiy institut. Chlen-korrespondent  
Akademii nauk Kazakhskoy SSR (for Brichkin). 2. Sibirskiy  
metallurgicheskiy institut imeni S.Ordzhonikidze (for Moskalev).  
Rekomendovana kafedroy gornykh mashin i podzemnogo transporta  
Sibirskogo metallurgicheskogo instituta.  
(Rocks—Testing) (Boring machinery)

MOSKALEV, A.N., kand. tekhn. nauk

Technical and economic indices of thermal drilling in Kuznetsk  
Basin mines. Izv. vys. ucheb. zav.; gor. zhur. 6 no.6:93-97 '63.  
(MIRA 16:8)

1. Sibirskiy metallurgicheskiy institut imeni Ordzhonikidze.  
Rekomendovana kafedroy gornykh mashin i rudnichnogo transporta.  
(Kuznetsk Basin—Boring)

MOSKALEV, A.N., inzh.

Basis of indices and the comparative scale of resistivity of some  
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(MIRA 17:5)  
7 no. 1:91-95 '64.

1. Sibirskiy metallurgicheskiy institut imeni Sergo Ordzhonikidze.  
Rekomendovana kafedroy gornykh mashin.

MOSKALEV, A.N., kand. tekhn. nauk; FILATOV, N.V., kand. tekhn. nauk;  
POPOV, V.M., inzh.; PEDIN, I.A., inzh.

Machines for jet piercing with a ring system of cooling.  
(MIRA 1786)  
Gor. zhur. no.5:45-46 My '64.

MOSKALEV, A.H., detrent; FILATOV, N.V., dotaent; POKW, V.M., inzhe.; FEDIN, I.A.,  
inzhe.

Efficiency of jet + rches in the jet piercing of rock. Izr.vyschets.  
(MIRA 18:1)  
zav.;gor.zhur. 7 no.9:68-72 '64.

i. Sibirskiy metallurgicheskiy institut imeni S. Ordzhonikidze. Re-  
komendovana kafedroy gornykh mashin i rudnichnogo transporta.

ACCESSION NR: AP4043656

S/0056/64/047/002/0767/0768

AUTHORS: Babenko, N. P.; Konstantinov, I. O.; Moskalev, A. P.;  
Nemilov, Yu. A.TITLE: Neutron polarization in the reaction D(d, n) $\text{He}^3$ 

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 2, 1964, 767-768

TOPIC TAGS: neutron polarization, deuteron scattering, deuteron  
cross section, deuterium, heliumABSTRACT: The authors used a previously published (ZhETF v. 45, 1389,  
1963) and somewhat improved procedure to measure the polarization of  
neutrons from the reaction D(d, n) $\text{He}^3$  at incident deuteron energies  
4.7 and 5.6 MeV, for a reaction angle of 45° in the center-of-mass  
system. The measurements were made with the extracted beam of the  
Radium Institute cyclotron at a deuteron energy  $6.6 \pm 0.1$  MeV. The  
target was gaseous deuterium at a pressure of 4.5 atm in a volume

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ACCESSION NR: AP4043656

bounded by two tantalum foils. The neutrons from the reaction were analyzed with a gas-filled scintillation counter at 135°. As shown in Fig. 1 of the enclosure the dependence of the neutron polarization on the incident-deuteron energy, as obtained by various investigators, tends to cluster about two experimental curves. The present results follow the upper curve of the figure. "The authors thank M. B. Miller for help with the measurements." Orig. art. has: 1 figure.

ASSOCIATION: None

SUBMITTED: 14Feb64

ENCL: 01

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NR REF Sov: 004

OTHER: 006

Card 2/3

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ACCESSION NR: AP4043656

ENCLOSURE: 01

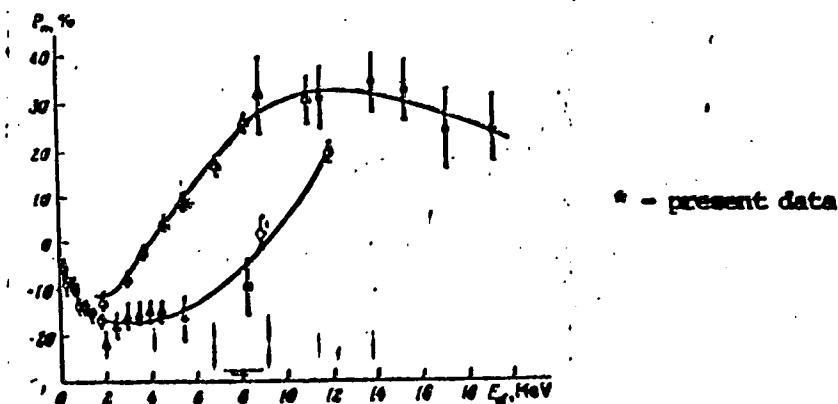


Fig. 1. Dependence of polarization of the neutrons from the reaction  $D(d, n)\text{He}^3$  on the incident-deuteron energy according to various sources.

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ACCESSION NR: AP4043658

Y,  
S/0056/64/047/002/0771/0773

AUTHORS: Anisovich, V. V.; Moskalev, A. N.; Fomin, V. V.

TITLE: Influence of logarithmic singularities on the parameters of  
certain resonances

SOURCE: Zh. eksper. i teor. fiz., v. 47, no. 2, 1964, 771-773

TOPIC TAGS: resonance scattering, omega meson, sigma particle,  
pion, rho meson

ABSTRACT: The purpose of this note is to call attention to the fact  
that resonances in the systems  $p\pi$  (A-resonance),  $\omega\pi$  (B-resonance),  
and  $\Sigma\pi$  ( $\Lambda^+$ -resonance) were investigated in the past in the majority  
of cases under conditions in which the spectra of the particles  $p\pi$ ,  
 $\omega\pi$ , and  $\Sigma\pi$ , in the region of resonant values of energy could be  
strongly influenced by logarithmic singularities of the type indi-  
cated by I. J. R. Aitchison, (Phys. Rev. v. 133, B1257, 1964).

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ACCESSION NR: AP4043658

Arguments are presented in favor of assuming that the observed large width of the  $\Lambda$ -resonance is indeed connected with the presence of such singularities. The decrease in the probability of  $\omega\pi^+$  production in the vicinity of 150 MeV, which has effectively led to a decrease in the observed resonance width, is also ascribed to this singularity. In the case of the  $\Sigma\pi$  resonance, it is quite possible that the  $\lambda_{1405}$  resonance does not exist at all. "The authors express deep gratitude to V. M. Shekhter for a discussion of several problems and to N. B. Brovtsyn for carrying out the numerical calculations." Orig. art. has: 2 figures and 2 formulas.

ASSOCIATION: Fiziko-tehnicheskiy institut im. A. F. Ioffe Akademii nauk SSSR (Physicotechnical Institute, Academy of Sciences SSSR)

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SUB CODE: NP

NR REF SOV: 001

OTHER: 011

Card 2/2

L 5783 L-65 EWP(k)/EWA(c)/EWT(m)/EWP(b)/T/EWP(v)/EWP(t) Pf-4 JD/HM  
ACCESSION NR: AP5012645 UR/0135/65/000/005/0034/0034  
621.791.94.03 25  
28

AUTHOR: Moskalev, A. N. (Candidate of technical sciences); Filatov, N. V. (Candidate of technical sciences); Popov, V. M. (Engineer); Fedin, I. A. (Engineer)

TITLE: Burning openings in 200-400 mm thick metal with a rocket-type torch

SOURCE: Svarochnoye proizvodstvo, no. 5, 1965, 34

TOPIC TAGS: flame cutting, cutting torch, cast iron torch cutting

ABSTRACT: Results are given of tests on burning openings in metal (cast iron shafts, molds, etc) with thicknesses of 200 to 400 mm with a kerosene-oxygen flame. The construction and operation of the rocket-type torch and cutting technology are described. Openings with a diameter of 55-60 mm are burned at a rate of 7-10 m/hr. Oxygen consumption is 25 to 50% less than in oxygen torch cutting. Openings can be burned in shafts with a diameter of 300-400 mm and in cast iron molds with thicknesses of 200-400 mm with the torch maintained in one position. Orig. art. has: 1 figure, 1 table.

Card 1/2

L 57831-65  
ACCESSION NR: AP5012645

2

ASSOCIATION: Filial instituta mekhaniki AN UkrSSR (Affiliate of the Institute of Mechanics UkrSSR); Sibirskiy metallurgicheskiy institut (Siberian Metallurgical Institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF Sov: 001 OTHER: 000

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